

# *Army Transformation Concept Development and Experimentation Plan*



*Accelerating Transformation  
Through a Culture of Innovation and Collaboration*

# The Army Transformation Concept Development and Experimentation Plan

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The Army continually upgrades the way it fights to maintain superiority over all potential adversaries and achieve complementary capabilities with other Services and nations. This is achieved by conducting rigorous concept development and experimentation (CD&E) in order to mature ideas from concepts to capabilities.

The Army Transformation Concept Development and Experimentation Plan (AT-CDEP) is The Army's aggressive and innovative plan for CD&E in a Joint context to develop our future, full-spectrum force, the Objective Force, as an indispensable combat multiplier for the Joint force.

## Why Transform?



**“The unparalleled strength of the United States armed forces, and their forward presence, have maintained the peace in some of the world’s most strategically vital regions. However, the threats and enemies we must confront have changed, and so must our forces. A military structured to deter massive Cold War-era armies must be transformed....”**

The National Security Strategy of the United States of America

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## New Challenges

- *Diminishing protection afforded by geographic distance*
- *Regional security developments*
- *Increasing challenges and threats emanating from territories of weak and failing states*
- *Diffusion of power and military capabilities to non-state actors*
- *Increasing diversity in the sources and unpredictability of the locations of conflict*
- *Rapid advancement of military technologies*
- *Increasing proliferation of Chemical, Biological, Radiological, and Nuclear High-yield Explosive (CBRNE) weapons and ballistic missiles*
- *Emergence of new arenas of military competition*
- *Increasing potential for miscalculation and surprise*

In recognition of this new strategic era and the internal and external challenges facing the U.S. military, the Defense Department's leadership identifies “Transforming Defense” as one of its strategic tenets to achieve the defense policy goals listed in the 2001 *Quadrennial Defense Review Report*. Two pillars of this defense transformation report, “Strengthening Joint Operations” and “Experimenting with New Approaches, Concepts, and Capabilities” highlight the importance of CD&E and Joint transformation.



# ...to see first, understand first, act first and finish decisively

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## The Vision

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The soldier is the centerpiece of the Army--a force that is responsive and dominant across the full spectrum of possible conflict. An integral part of the nation's Joint military force, the U.S. Army is:

- *Strategically Responsive*
- *Deployable*
- *Agile*
- *Versatile*
- *Lethal*
- *Survivable*
- *Sustainable*



These seven characteristics, outlined in the *Army Vision*, are the foundation for the development of Army organizations, their operational concepts, required capabilities and missions.

The AT-CDEP supports this vision by integrating Objective Force development across Doctrine, Organizations, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF) in a Service/Joint context. To be successful, the AT-CDEP must achieve four essential tasks:

- *Learn*
- *Innovate*
- *Push the limits*
- *Reduce risk*

The Army must harvest innovative concepts and solutions from a multitude of sources, determine their limits through rigorous experimentation, incorporate lessons learned from current forces, interim forces, and past experimentation to maximize force accomplishments and ultimately reduce the risks of transforming to the Objective Force.

## The Plan

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*To achieve its essential tasks, the AT-CDEP proceeds along four axes:*

- **Developmental CD&E**  
Exploits Objective Force Battle Labs and other CD&E partners to conduct aggressive experimentation supporting Objective Force developments and decisions such as Milestone B, Milestone C, First Unit Equipped (FUE), and Initial Operating Capability (IOC).
- **Exploratory CD&E**  
Pursues innovative, aggressive experimentation across a wide range of transformational concepts and venues, with the greatest possible latitude to enable creative approaches to future warfighting.
- **Integrating Experimentation**  
Employs operationally focused experimentation to ensure that the complex, knowledge-enabled, network centric Objective Force warfighting systems-of-systems are fully integrated across proponents and within Service/Joint contexts.
- **Service/Joint CD&E**  
Supports close collaboration with Service and Joint transformation efforts to ensure that the Army's indispensable contribution to the Joint warfight is fully integrated in concepts and capabilities.

The AT-CDEP provides The Army's framework for Objective Force development *in collaboration with DoD, industry and academia to learn, innovate, and push the limits of the possible to develop a future Joint force that meets and exceeds our national security challenges.*

# Army Transformation Concept Development

"Accelerating Transformation through a Concept Development Cycle"

2004



**Learn**



- Collaborative, distributed, live and virtual experimentation links Army Labs and Joint CD&E

- Army Transformation War Games



**Push Limits**

**Develop**

Develop the Army as an Interdependent Part of the Future Joint Force

**Explore**

Unconstrained Exploration of the Spectrum of Transformation to Shape the Future

Collaborative Experimentation to Develop the Future Joint Force

**Service**

Future Joint, Interagency, and International Operations that Meets a National Challenge

- US Joint Force Development

- Concept Development
- Prototype/Validation
- Distributed Concept Development Experimentation

- Air Force, Navy, Marine Corps, Coast Guard Experimentation



# Development and Experimentation Plan

"Culture of Innovation and Collaboration"

- 2015

**Core**

Exploration across  
Transformational Concepts  
the Future Army

**Innovate**

**Integrate**

Unify  
Army  
Futures  
Development  
within Joint  
Context

Partnership  
Develop the  
**Joint Force**

**Joint**

, and Multinational Force  
and Exceeds  
Security  
Engages

**Reduce Risk**

es Command  
velopment  
alidate Concepts  
Continuous  
tation Environment  
y, Marine Corps,  
Experimentation

- Army  
Transformation Experiments**
- Integrated across Services, Proponents & DOTMLPF Domains
  - Executed within a Joint, Multinational, and Interagency Context
  - Distributed - Virtual and Live



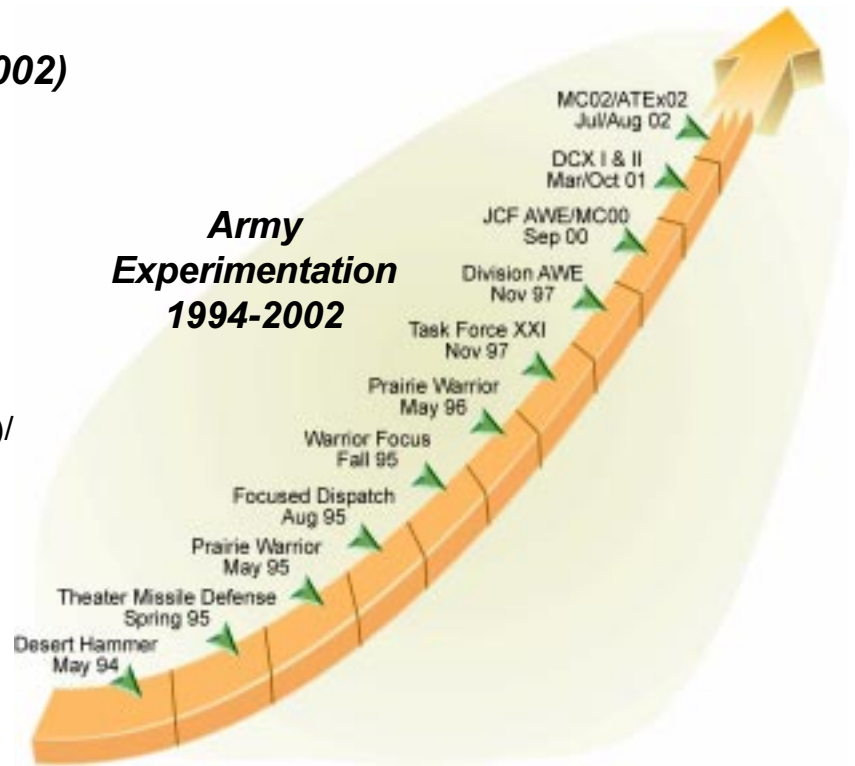
...through innovation & collaboration

## ***Where We Have Been (1994-2002)***

- Army After Next (1996-1999)
- Force XXI Prime Directive (1995)
  - Task Force Advanced Warfighting Experiment (AWE) (1997)
  - Division AWE (1997)
  - Division Capstone Exercise I/II (2001)
- Joint Contingency Force AWE (2000)/Millennium Challenge (2000)
- Millennium Challenge (2002)/Army Transformation Experiment (2002)
- Army Transformation Wargame, Vigilant Warriors (2000-2002)
- Branch Proponent Battle Labs
- Research, Development & Engineering Centers focused on supporting respective Army Materiel Command (AMC) Major Subordinate Commands (MSCs)



## ***Army Experimentation 1994-2002***



## ***Where We Are Now (2003)***

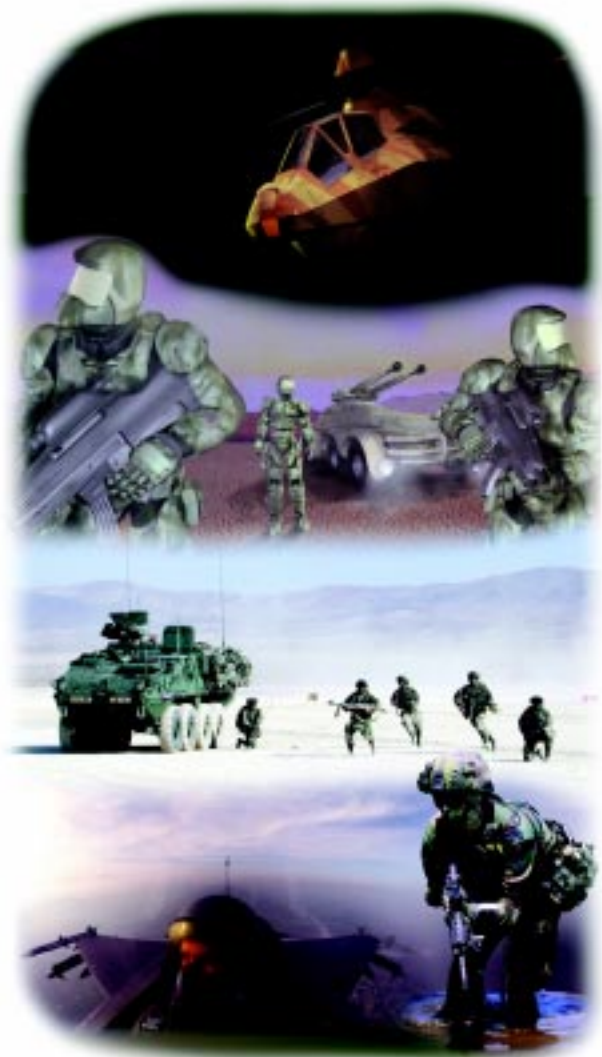
- Service/Joint Integration
  - US Joint Forces Command (USJFCOM) Limited Objective Experiments
  - Pinnacle Impact 2003
  - Service Title X Events
    - Army Transformation Wargame 2003
    - Expeditionary Warrior
    - Global Engagement
    - Navy Global Wargame 2003
    - SOCOM Wargame
- Unit of Action Concept Experimentation Program
  - Distributed Battle Lab Experimentation supporting OF development
- Unit of Action Maneuver Battle Lab
  - Prototype of Integrating Lab
  - Not Branch Specific
- Stryker Brigade Combat Teams (SBCT)
- Army Transformation Concept Development and Experimentation Plan Implementation (2003-2015)



## ...to develop the future Joint Force

### Where We Are Going (2004-2015)

- Integrated Battle Labs linked to other Battle Labs, AMC, Joint, and other Services
  - Battle Lab Collaborative Simulation Environment (TRADOC)
  - Distributed Continuous Experimentation Environment (USJFCOM)
- Continued integration with Joint, Multinational, Interagency, and Service Title X Wargames and Experiments
- SBCT leveraged as bridge to the future
- Realistic Army Experiments incorporating live and virtual forces
  - Structured to aggressively support Objective Force development
  - Planned collaboratively with Services/USJFCOM



	2004	2005	2006	2007	2008	2009	2010-15
Service/ Joint	OF Interdependent with Joint Concepts	OF Interdependent with Joint/Service Concepts	Prep for FY 07 Field Experiment	Participate in Joint Field Experiment	Extend & Refine Integrated Joint Operating & Functional Concepts		Future Joint Force
Develop	Products for FCS SDD & UE Capabilities	Mature Draft Products for FCS SDD & UE Capabilities	Validate Products for FCS SDD & UE Capabilities	Refine UA/UE Concepts; Develop TTPs for First Unit Equipped	Refine UA/UE Concepts; Support First Unit Equipped	Refine UA/UE Concepts; Prep for Initial Operating Capability	Develop The Army's Future (2020+) Joint Force
Integrate	Assess OF O&O Plans	Prep for FY 06 Ramp-up	OF Capability Assessment; Prep to Execute FY 07 Field Exp.	Validate OF Capabilities for First Unit Equipped	Initial OF Capabilities Assessment	Integrated, Comprehensive OF Capability Assessment	Holistic Integrated Joint Futures Development
Explore	Explore the Spectrum of Transformational Concepts to Shape the Future Army						

FCS - Future Combat Systems  
OF - Objective Force  
O&O - Operational & Organizational Plan

SDD - System Development & Demonstration  
TTP - Tactics, Techniques & Procedures

UA - Unit of Action  
UE - Unit of Employment



**"Our challenge in this new century is a difficult one. It's really to prepare to defend our nation against the unknown, the uncertain, and what we have to understand will be the unexpected. This may seem on the face of it an impossible task. It is not. But to accomplish it, we have to put aside the comfortable ways of thinking and planning, take risks, and try new things so that we can prepare our forces to deter and defeat adversaries that have not yet emerged to challenges."**

**Secretary of Defense Donald Rumsfeld  
31 January 2002 Speech at the National Defense University**



For additional information on the Army Transformation Concept Development and Experimentation Plan  
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